IN THE CLAIMS:

- 1. (Currently Amended) A data acquisition system comprising:
 - a memory;
 - a processor coupled to the memory; and
- a first communication port adapted for coupling to a vessel navigation system; and
- a switch, when actuated in response to an event, causes information retrieved from the vessel navigation system to be stored in memory <u>and be</u> associated with data that includes by-catch information.
- 2. (Cancelled)
- 3. (Currently Amended) The data acquisition system of claim 2 <u>further</u> <u>comprising a display</u>, wherein the display displays at least one entry line having at least a date and a position associated with the event.
- 4. (Original) The data acquisition system of claim 1 further comprises at least one of a sounder, a radar or a chart plotter.
- 5. (Original) The data acquisition system of claim 1 further comprising: an enclosure housing the memory and processor; and
- a second communication port coupled to the enclosure configured to communicate with a device remote from the enclosure.
- 6. (Original) The data acquisition system of claim 5, wherein the second communication port is configured to transfer information at least one of optical communication, wireless communication, via a modem or via a land-line.

7. (Original) The data acquisition system of claim 6, wherein the first

communication port is coupled to a network comprising the vessel navigation

system includes at least one of a sounder, a chart plotter, a radar and a digital

bearing indicator.

8. (Currently Amended) The data acquisition system of claim 1 further

comprising:

a remote device selectively in communication with the memory through

the second communication port instructions, when executed by the processor,

causes the system to:

analyze data stored in the memory to determine areas or techniques to

avoid to maximize harvest of a targeted species while avoiding by-catch.

9. (Currently Amended) The data acquisition system of claim 8 claim 1, a

remote device selectively in communication with the memory through the second

communication port wherein the remote device is at least one of a PDA, laptop or

computer.

10. (Cancelled)

11. (Currently Amended) A method for acquiring fishing data, comprising:

generating a signal in response to an event; and

automatically storing date and vessel position in a memory disposed on

board a vessel in response to the signal; and

associating the date and vessel position with by-catch information relating

to the event.

12. (Original) The method of claim 11, wherein the step of generating the

signal further comprising manually actuating a switch.

13. (Original) The method of claim 11 further comprising:

storing information from a vessel navigation system in the memory in response to the signal.

- 14. (Original) The method of claim 13, wherein the step of storing information further comprises storing at least one of water temperature, heading, speed and depth.
- 15. (Currently Amended) The method of claim 11 further comprising: manually entering a information information associated with the event.
- 16. (Original) The method of claim 11 further comprising: transferring the stored information to a remote device.
- 17. (Original) The method of claim 16, wherein the step of transferring further comprises establishing optical, wireless or land-line communication between the remote device and the memory on board the vessel.
- 18. (Currently Amended) The method of claim 11 further comprising building a database of information associated with events; and

performing statistical analysis on the event information stored in the database.

- 19. (Cancelled)
- 20. (Currently Amended) The method of claim 18 further comprising displaying a selected event from the database identifying factors that increase harvest of a target species relative to the by-catch from information stored in the memory.

21. (New) The system of claim 8, wherein analyzing the data further comprises:

analyzing multi-variable effects to reduce by-catch.

22. (New) A method for acquiring fishing data, comprising:

storing vessel position, target species catch and by-catch information in a memory disposed on board a vessel to build a historical database; and

determining, from the historical database, areas or techniques that relate to harvest of a targeted species relative to by-catch.

23. (New) The system of claim 21, wherein determining further comprises: analyzing multi-variable effects to reduce by-catch.